



Pacific
Community
Communauté
du Pacifique

Geoscience Division (GSD) of Pacific Community (SPC-GSD)

FIG Working Week 2016

Reference Frame in Practice

Christchurch, New Zealand 1-2 May 2016

Brief History of GSD (formerly SOPAC)

GSD was established in:

- 1972: as a United Nations Development Programme (UNDP) Regional Project called the Committee for Coordination of Joint Prospecting for Mineral Resources in South Pacific Offshore Areas (CCOP/SOPAC)
- 1990: an independent inter-governmental regional organisation:
 - ✓ South Pacific Applied Geoscience Commission
 - ✓ Pacific Islands Applied Geoscience Commission
- 2011: Applied Geoscience and Technology Division of SPC.
- 2015: Geoscience Division of SPC

SPC GSD's Goal

“to apply geoscience and technology to realise new opportunities for improving livelihoods of Pacific communities.”



SPC Headquarters: Noumea, New Caledonia. Regional offices: Suva, Fiji Islands, and Pohnpei, Federated States of Micronesia.
Country office: Honiara, Solomon Islands.
For contact details – Website: www.spc.int Email: spc@spc.int

What Does GSD Do?

- Ensure earth sciences are fully utilised in order to fulfil the SPC Mission
 - ✓ In the island perspective, the earth sciences comprise geology, geophysics, oceanography and hydrology.
- To fulfil this, the division has three technical work programmes:
 - Geoscience for Development (G4D)
 - Water and Sanitation
 - Disaster Reduction

What Does GSD Do?

- These three programmes share common technical support services:
 - Natural Resource Economics
 - Geographical Information System and Remote Sensing
 - Publications and Library
 - ICT for Development
 - Corporate Services

Geoscience for Development

The Geoscience for Development Programme (G4D) provides vital applied ocean, island and coastal geoscience services to SPC member countries. These technical services are strategically deployed in response to member requests for assistance in the development, management and monitoring of natural resources and unique island environmental systems and processes. We help members to better:

- Govern and develop their natural resources;
- Increase their resilience to natural hazards; and
- Access data-based approaches to adaptation.

G4D Services

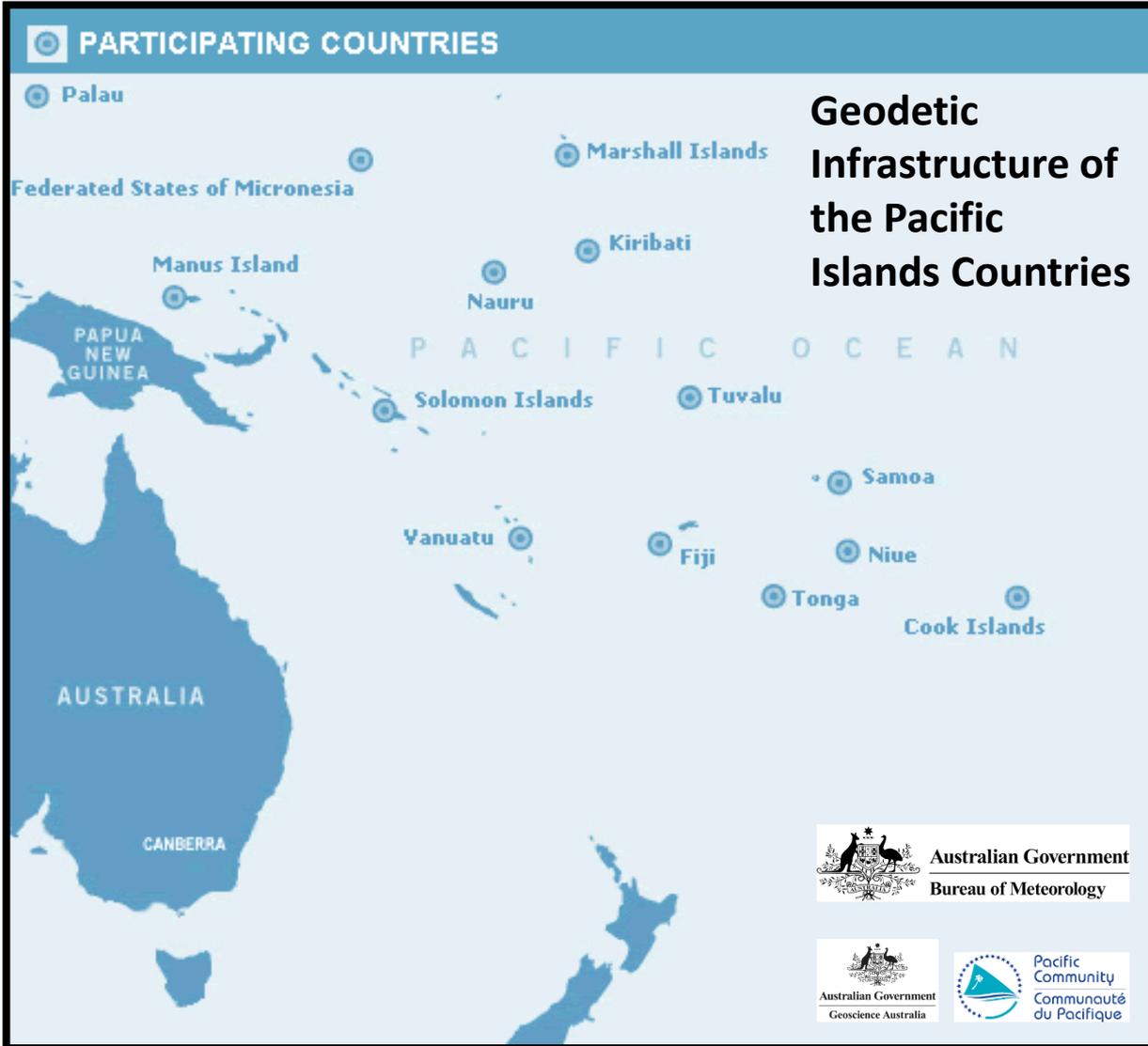
- G4D is unique in the region. We maintain and deliver specialist skills, tools and services through flexible, integrated approaches designed to meet the needs of pacific island communities and environments. G4D is committed to bringing these services to members in an effective and timely manner. We continually strive to build "hands-on" capacity in the countries where we work, in all sectors of ocean and island applied geosciences.
- Some of these services include:
 - Ocean and coastal resource characterization, resource use solutions, monitoring and development
 - Provision of science-based ocean and coastal policy and governance support and advice
 - Provision of strategic communication and advocacy for coastal and ocean resource policy
 - Strategic alliances with regional and international partners in technical, research and development assistance
 - Capacity building via specific initiatives or through "hands-on" joint implementation of works
 - Science-based vulnerability assessments particularly in shoreline and coastal zones
 - Science-based adaptation responses
 - Continued secure investment in instrumentation, tools and support services as the only regional technological facility in geoscience

G4D Critical Issues

- In addition to the above, the following five critical issues are embedded throughout the G4D's work program:
 - Coastal development, Urbanisation and Vulnerability
 - Maritime Boundaries
 - Climate Change and Adaptation
 - Natural Resource Development
 - Information Management and Analysis
- The strong applied geoscience capacity of G4D also provides support for scientific and research interaction with other regional and international technical entities. We maintain a number of unique research and development partnerships, acting as a conduit for improved understanding of pacific island research needs to development partners and the international arena. G4D will continue to create, maintain and disseminate geoscience knowledge to provide technical advice to pacific island governments and to support policy development and decision making.

G4D Regional Partnership Projects

Pacific Sea Level Monitoring Project



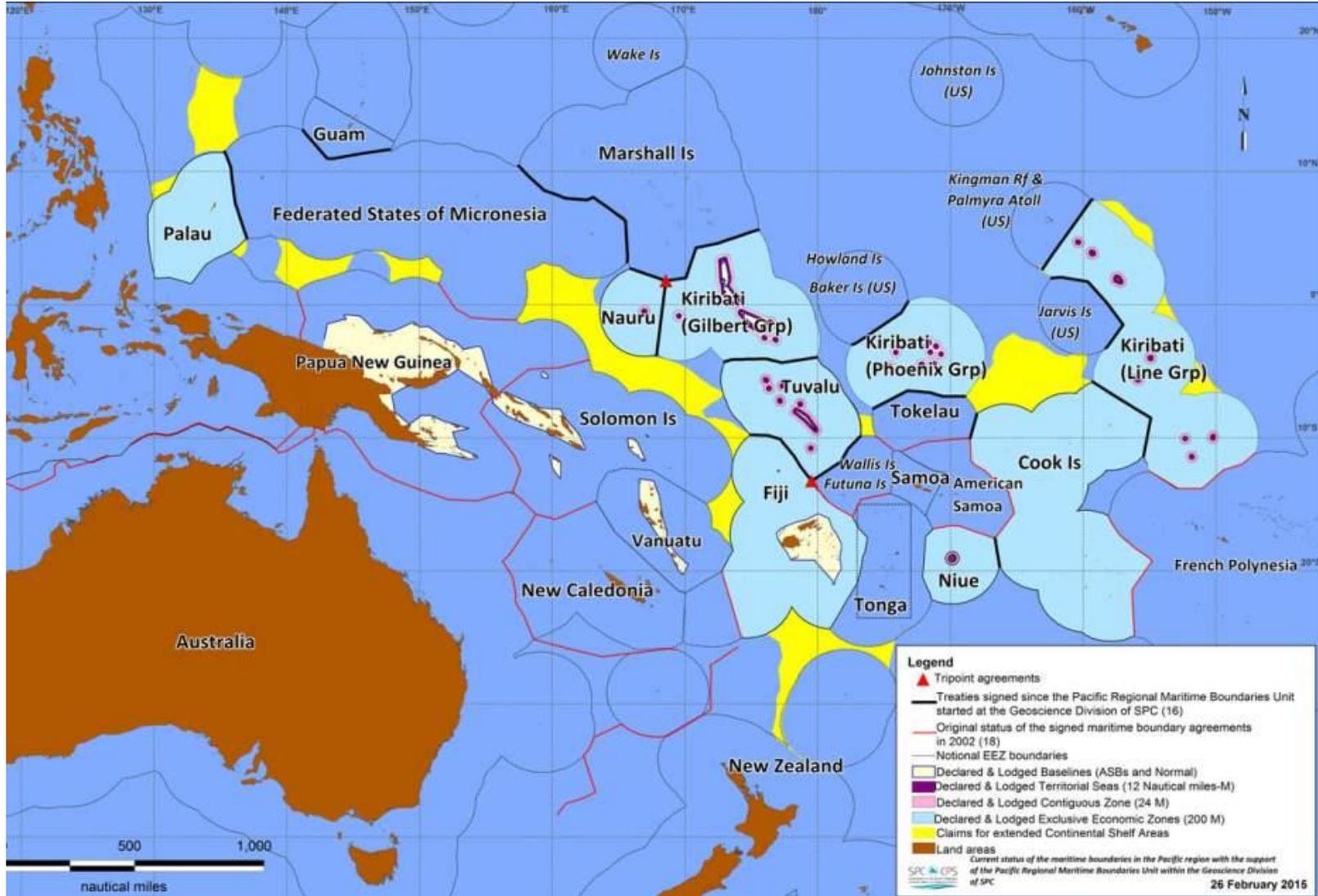
GNSS Station



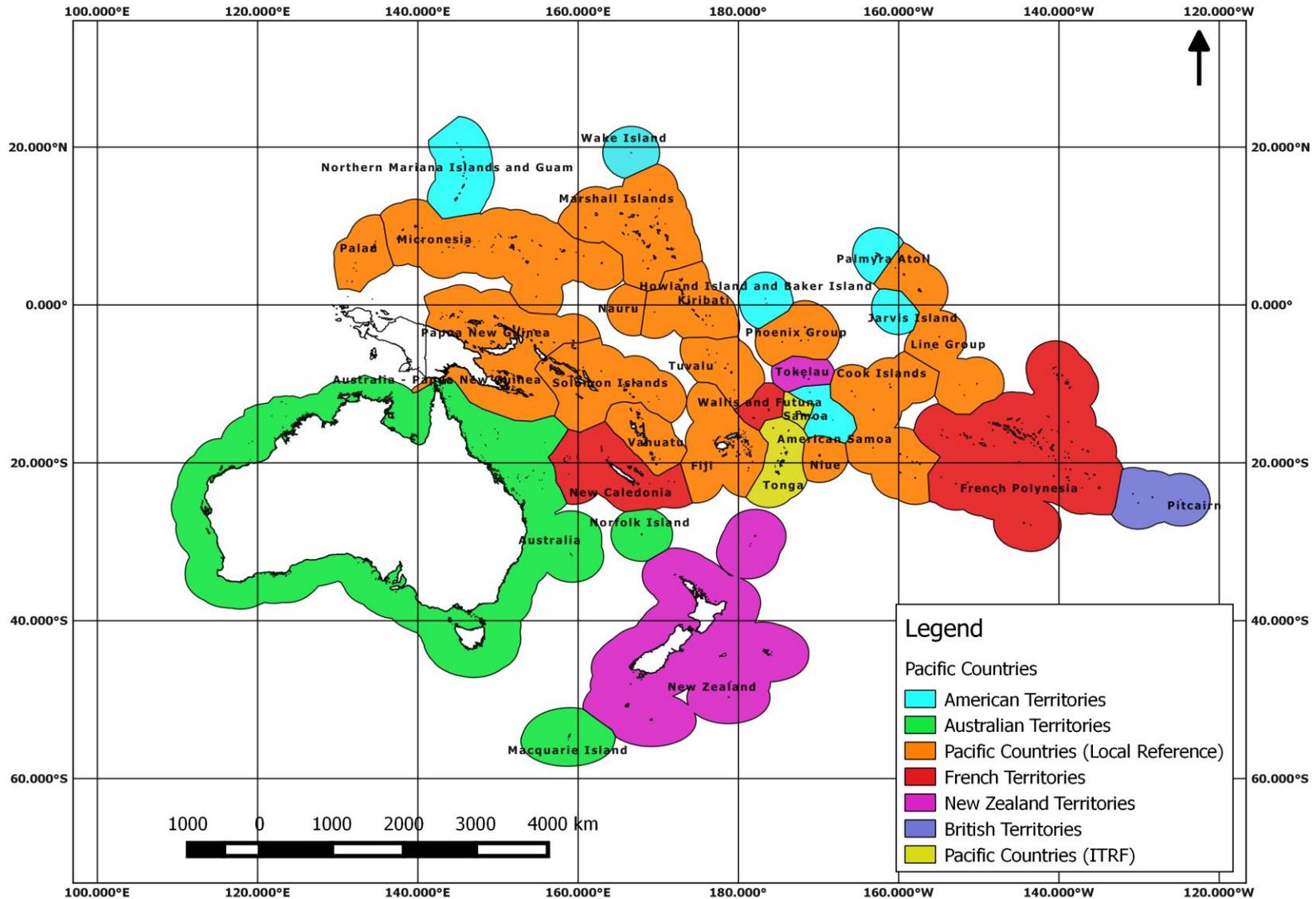
Tide Gauge Station

G4D Regional Partnership Projects

Maritime Boundaries of PICs



Geodetic Reference Frame - Pacific



Pacific Geospatial & Surveying Council

Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu



Vision

Sustainable development in the Pacific enabled by world class geospatial information and surveying services

Mission

- Building the capacity of regional surveyors
- Improving and standardising geospatial information gathering and dissemination
- Maximising economic growth and alleviating poverty
- Informing natural resource management, disaster risk management and climate change adaptation

<http://gsd.spc.int/pgsc/>

Thank You Too Much

